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the **MOTIVATION**



My name is Christopher Struble MD, psychiatrist and president of Renew TeleHealth, a telepsychiatry practice that can see nearly any patient in the state of CA from their home computer and web camera. I started this practice with the **desire to** improve access to treatment that exceeds

the current standard of care in the field. In the spirit of improving the standard of care, I've also included a section at the end of this booklet of high-yield psychiatric facts that are oriented toward clinical scenarios encountered by non-psychiatrists. These facts are a distillation of the reading of many hundreds of psychiatric papers and represent years of careful note taking. To begin, I'd like to orient you to some of the limitations commonly seen in psychiatric practice to help explain the ways I've sought to move beyond this.

Don't forget to check out our list of high-yield psychiatric tips for non-psychiatrists toward the end of this booklet.



Questions about how Renew Telehealth can fit into your practice? Call 650.450.9520 to schedule a Q&A session with Dr. Struble.

the **PROBLEM**

"Most patient's treatment plans are not only diagnostically incomplete but even if they were complete, the most effective treatments for their conditions are not referred to."

Unfortunately, the treatment one typically receives in psychiatry is influenced heavily by billing and volume. The insurance compensation for the most important part of psychiatry, the diagnostic assessment, is woefully inadequate and therefore incentivizes most providers to perform these in an hour or less (sometimes as short as ½ hour). These incomplete diagnostic assessments then lead to incomplete treatment plans which tend to skew heavily toward prescribing medications in the "15 minute med check," which is where psychiatrists do very well financially. The amount of psychotherapeutic training required to graduate psychiatric residency is extremely limited, rendering many psychiatrists without a full understanding of the multitude of psychotherapeutic treatment options. This hampers the referral rate to such treatments, even when it's been well established in the medical literature that they're far more effective than a rival medication for the patient's diagnosis. As a result, most patient's treatment plans are not only diagnostically incomplete but even if they were complete, the most effective treatments for their conditions are not referred to. Worse yet, many specialized forms of therapy that would be indicated are not even practiced by therapists who are geographically accessible to the patient. It's unsurprising that the above factors lead to an epidemic of psychotropic polypharmacy and our psychiatric patients regularly do not get better.

the **SOLUTION**

Before I had even started training, I knew that the only way to progress beyond these limitations was to develop a method of psychiatric practice that works outside the current system of psychiatrists focusing primarily on medication management. Then after residency I founded my own company to do things differently, Renew TeleHealth, the first digital clinic of its kind.

1 •• We focus on thorough
diagnostic assessments before
making any treatment decision (these
are 3 hours total but we only charge
2 hours of our typical hourly rate).

2 •• We judiciously prescribe medications, focusing on the fine balance between side effects and benefits. We discuss the medication's basic science, reasonable effectiveness expectations, as well as limitations (especially when compared with a rival therapy or skills-based treatment). The long-term medical literature has shown that psychotherapy is where the biggest lasting improvements generally occur. When appropriate, we'll recommend therapy before medications or use medications on a time-limited basis while waiting for therapy improvements to



set in. We promote sensible dosing and typically recommend a psychological treatment focused on the patient's diagnosis to help reduce medication requirements in the long-run. We also have extensive knowledge in the safest ways to reduce or stop medications if this treatment plan appears to be in the patient's best interest. Although we judiciously utilize medication, we in no way discount its helpfulness and never forgo its use when appropriate.

3 •• We provide customizedtherapy options that are tailoredto the comprehensive diagnostic

assessment. In most cases our targeted psychotherapy treatments have been proven to be more effective and provide longer lasting benefits than medications.

4 •• Teleconferencing not only improves patient show rates but it also removes geographical barriers and allows the pairing of the best psychotherapist to the patient's unique diagnostic profile for targeted therapy options. Our therapists are hand-picked and represent the best in the field. A major advantage to remote conferencing is that it allows **access to our specialized team no matter the patient's location.**

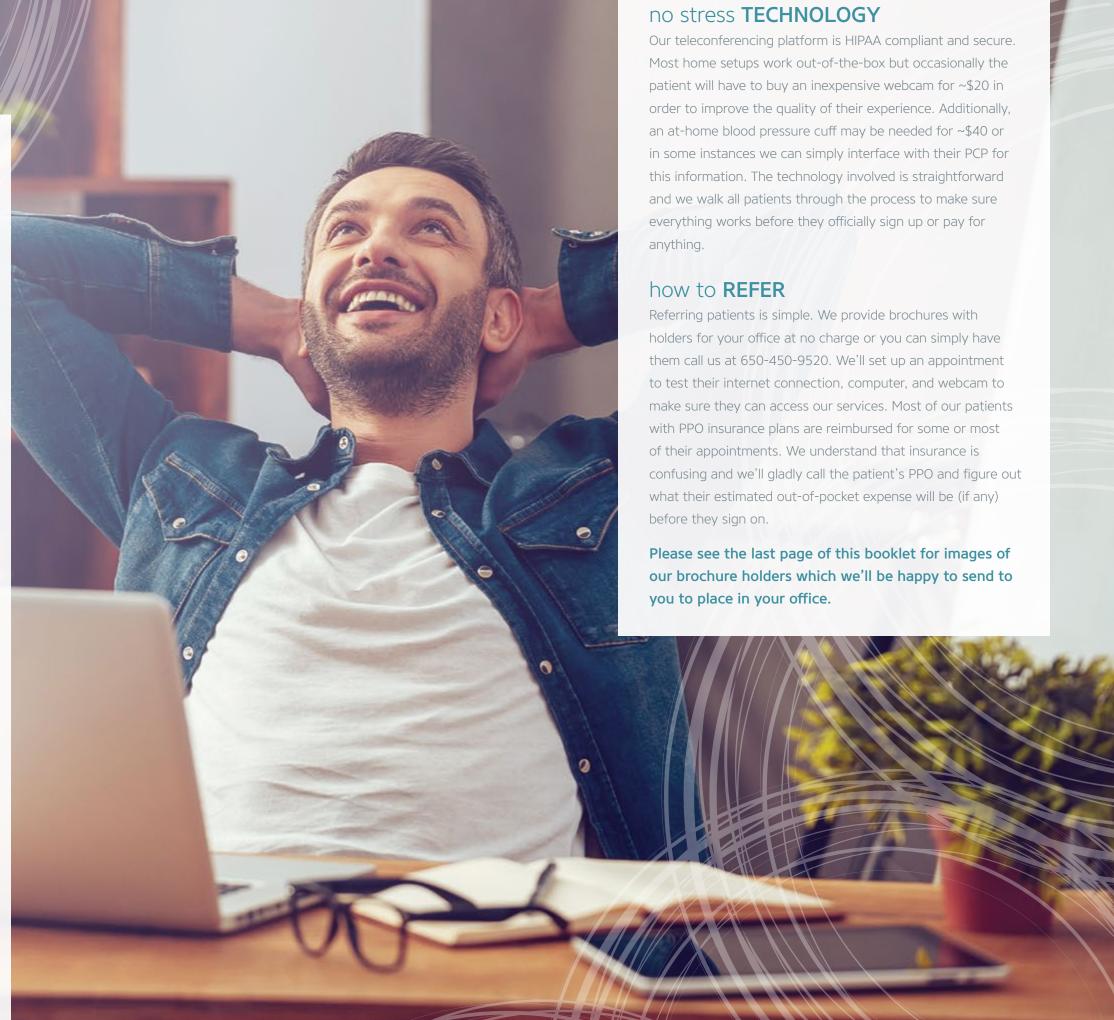
our **SERVICES**

- •• Three hour enhanced diagnostic interview with a focus on screening for nearly all possible psychiatric diagnoses. (This step is performed before a treatment plan is drafted or medications are written in order to formulate an efficient plan of care that is specifically targeted to the patient.)
- •• Medication management focusing on judicious medication use.
- •• CBT for Depression
- •• CBT for Panic Disorder (i.e. "Panic Attacks")
- •• CBT for Generalized Anxiety Disorder
- •• CBT for Phobias
- •• CBT for Social Anxiety Disorder

- •• CBT for Psychosis (i.e. CBT for Schizophrenia)
- •• CBT for Nicotine Dependence
- •• CBT for Insomnia
- •• Bipolar Education & Early Warning Signs Monitoring
- •• Exposure with Ritual Prevention (EXRP) for Obsessive Compulsive Disorder (OCD)
- •• Exposure-based Treatment for Compulsive Hoarding
- •• Grief, Loss, and Bereavement Counseling
- •• Treatment for Impulse Control Disorders
- ADHD Life Skills Training
- •• DBT-based Life Skills Training
- •• Mindfulness Skills Training

Any diagnosis requiring an inpatient level of treatment or a coordinated outpatient clinic cannot be treated via teleconferencing and will require a referral to a higher level of care within the patient's community. Some services that cannot be performed via teleconferencing include advanced treatment of eating disorders such as Anorexia, Dialectical Behavioral Therapy (DBT) and Prolonged Exposure (PE) for PTSD.

In select instances we can coordinate our psychiatric/medication services with a specialized outpatient provider in the patient's area. Although we can treat nearly all indications, if we cannot treat the patient through teleconferencing we will make every effort to diagnose them accurately and develop a treatment plan to forward to a provider in their area.



•• what informs TREATMENT?

To help clarify our treatment process, we must begin with what informs the course of treatment, the "effect size." This is likely the most under-appreciated statistic in all of medicine. Simply put, the larger the effect size, the better the chance the patient improves. When reading papers we tend to focus on what are called "p-values," a statistic that shows that the data is "likely not due to chance," but the p-value says nearly nothing of the "size of effect." Getting a paper published in the medical literature does not require a large size of effect, only a p-value which indicates that the findings are "likely real" and not random. Therefore, the scientific and medical literature is flooded with findings that are "likely real" but also very small in the amount they improve the patient's symptoms. The effect size is generally a positive number which is graded as 0.2 being a "small size of effect," 0.5 being a "moderate size of effect," and >0.8 being considered a "large size of effect." Bottom line - the larger the effect size the better the chance the patient will improve.

•• our therapy is **TARGETED & EFFECTIVE**

Cognitive Behavioral Therapy (CBT) is a targeted form of therapy which is offered in many forms by our practice. Numerous meta-analyses have shown that when CBT is used for panic disorder, hypochondriasis, social anxiety disorder, PTSD, generalized anxiety disorder, specific phobias and obsessive compulsive disorder it carries a large effect size. **For nearly all of these diagnoses CBT outperforms medications and in many instances markedly so.** CBT has moderate effect sizes for depression and schizophrenia and small to moderate sizes for bipolar disorder, highlighting the importance of concurrent medication management in these diagnoses, especially bipolar and schizophrenia. Overall, the treatment gains from therapy have been shown to be long-lasting and do not reverse the way medications do when they're removed. One of the most common shortcomings with therapy is that patients are given open-ended "supportive therapy" which is not targeted at their most functionally impairing diagnoses. This appears to happen for two reasons, (1) lack of diagnostic rigor during the patient's intake and (2) a lack of training in specialized therapy protocols.^{[11][2][3][4][5][6][7][8]}

Anxiety disorders are commonly missed and are the most amenable to CBT.

In general practice, even psychiatric practice, anxiety disorders are commonly missed during intake in lieu of the diagnoses that these tend to generate over time, such as depression (i.e. patients with longstanding anxiety disorders are more susceptible to depression). In one well designed study, anxiety diagnoses were missed ~2/3 of the time, even though the intakes were performed by psychiatrists. Since the anxiety spectrum diagnoses have the largest effect sizes in therapy, it's of the utmost importance to catch these and provide gold-standard therapies in order to improve the patient's quality of life the most.^{[9][10][11]} "For nearly all of these diagnoses CBT outperforms medications & in many instances markedly so."









HIGH YIELD TIPS *for* **Non-Psychiatrists**:

In the spirit of improving the standard of care, I've included this section of high-yield psychiatric facts that are oriented toward clinical scenarios encountered by non-psychiatrists.

- **1. Benzodiazepines** are far more dangerous than typically recognized.
- **a.** Chronic users show large effect size deficits in numerous cognitive parameters. ^[12]
- **b.** From 1999 to 2009 there was a 5-fold increase in accidental deaths attributable to benzodiazepines.^[13]
- **c.** When combined with opiates there is far more respiratory sedation, thus contributing to accidental overdose death rates.^[14]
- **d.** Long-term benzodiazepine use is associated with treatment resistant depression.^[15]
- e. Close to 2/3 of US hypnotic prescriptions go to chronic users. The mortality hazard associated with taking prescription sleeping pills more than 30 days in the past month is similar to the hazard of smoking 1-2 packs of cigarettes per day. Cognitive behavioral therapies for insomnia are the best supported treatment for chronic insomnia.^[16]
- **f.** Benzodiazepines for panic disorder likely harm the long-term treatment outcomes, especially when compared to CBT for panic disorder. ^[17]
- g. Flurazepam is a useful benzo for tapering patients because it's a partial agonist, has a long half life and takes 3-5 hours for its "peak effect" so that it's not as reinforcing.^[18]
- **2. Prazosin** QHS is a highly effective treatment for PTSD nightmares with a large effect size.^{[19][20][21][22]}
- 3. Borderline personality disorder is commonly confused with "bipolar disorder." A large proportion of cases diagnosed with bipolar disorder are better accounted for by borderline personality disorder. The treatments are vastly different between these two diagnoses. Remember the hallmark of mania.... decreased need for sleep with concurrent goal directed activities. The reason for the lack of sleep is possibly the most important diagnostic distinction.
- **4. "Early warning signs"** monitoring for mania is a powerful adjunct to medication in improving outcomes in patients with bipolar disorder.^[23] This important therapeutic adjunct is available at our practice.

- **5. Hydroxyzine** is a useful add-on PRN for generalized anxiety disorder, especially in patients with histories of benzo misuse.^{[24][25]}
- **6. Z-drugs** such as zopiclone (Lunesta), zolpidem (Ambien), and zaleplon (Sonata) are more harmful than typically realized.
 - a. These are only recommended to be used for no more than 4 weeks. However, they are almost always prescribed longer than this. In one study of primary care in UK (n=370), a minimum of 93% of Z-drug users had been taking them more than 4 weeks.^[26]
- **b.** Ambien is responsible for more ER visits due to adverse side effects than any other psychotropic medication. This is not just because Ambien is prescribed often as the danger is out of proportion to the prescription rate. Adverse events are substantially related to falls.^[27]
- 7. Melatonin is helpful in sundowning.^[33] The melatonin agonist Ramelteoni is highly effective as a prophylaxis for delirium in high risk hospital inpatients,^[34] and melatonin is effective at promoting sleep in children with ADHD. It is well tolerated and has nearly no side effects, even when taken for years.^[28] Melatonin improves sleep in insomnia and the effects do not appear to dissipate with continued use. Although the absolute benefit is smaller than other pharmacological treatments for insomnia, melatonin has a "benign" side-effect profile.^[29] Patients will become dependent on its effects just like any other sleep medication as their bodies produce less endogenous melatonin.² Fortunately, there are nearly no side effects so longstanding use is of little concern. Melatonin should be given at 6pm or about 3-4 hours before sleep time to mimic its physiological role. My recommendation is a 3mg timed release version available on Amazon.com from "Source Naturals" brand. Never give 5mg or 10mg as this is not necessary and facilitates tolerance.^[28-34]

Continued on next page.



HIGH YIELD TIPS for Non-Psychiatrists:





REFERENCES for THIS DOCUMENT



- 8. Anticholinergics that are centrally acting are widespread and should be minimized in all patients but especially in the elderly given their association with cognitive impairment.
 - **a.** Based on one study, taking 50mg of Benadryl every night for 10 years would be 3,650 total standardized daily dose of anticholinergic activity (TSDD). 30mg QAM of paroxetine for 10 years would be 10,950 TSDD. The study showed that 1,095 TSDD and above was associated with a 50% increase in dementia and the Benadryl and Paxil figures above are about 3x and 10x larger than the 1,095 cutoff.^[35]
 - **b.** One study evaluated 107 commonly used medications for their anticholinergic activity. The take-home points were:^[36]
 - i. Citalopram/escitalopram aren't anticholinergic.
 - ii. 20mg per day of paroxetine is about 200mg of Benadryl a day from an anticholinergic standpoint.
 - iii. Quetiapine is one of the least anticholinergic antipsychotics.
 - iv. When accounting for therapeutic dosing, clozapine is probably the most anticholinergic drug that is commonly prescribed.

9. SSRIs

a. The overall effect size for antidepressants for depression was just 0.31 (i.e. "small") when looking at all the data the FDA had received (vs only the published data which was inflated to an effect size of 0.41 because negative trials don't make it into the medical literature). Remember that CBT has an effect size in the moderate range, making it clearly more effective and with little to no side effects and with maintenance of long-term gains.^[37]

- **b.** SSRIs and SNRIs do not tend to cause much weight gain. Mirtazapine is not an SSRI and does cause substantial weight gain.^[38]
- c. SSRIs cause a global blunting of emotions for both negative and positive stimuli^[39] and the most common under-appreciated negative side effects are a diminished ability to cry, a diminished ability to feel irritated or upset, a diminished interest in sex, diminished erotic dreams, diminished creativity, diminished ability to become angry, and diminished pleasure during sex (from patient self reports).^[40] Since these side effects are hard to see, are not asked about and are easily overlooked, many physicians consider the risk/benefit profile of SSRIs to be more benign than warranted. This highlights the importance of concurrent psychotherapeutic treatment in order to minimize SSRI use in the long term if appropriate.
- d. Bupropion is interesting because it is a weak stimulant, hence its lack of sexual side effects and lack of any evidence of weight gain. It's the only available agent with its unique pharmacological profile but more or less it's a weak amphetamine. Be careful because bupropion is commonly abused, just like stimulants and can make anxiety disorders worse.^[41]
- **10. Antipsychotics** have weak effect sizes for augmentation in depression and marked degrees of harm.^[42] The best overview of this topic is Spielmans et al because other meta-analyses only show the physician-rated scales which show larger effects than the patient scales and therefore paint an unfairly rosy picture for augmentation. Also, other meta-analyses do not show the likelihoods of harmful side effects as Spielmans does.^[42]

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Getting started is simple. If you have any questions about referring patients to Renew TeleHealth please contact us: **RenewTeleHealth.com** •• 650-450-9520

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our RATE SCHEDULE

In order to ensure that we have ample time to provide the quality of service we strive for, we do not accept insurance directly. However, most of our clients with PPO insurance plans get some or most of their appointments reimbursed. We understand that insurance is confusing and we'll gladly call the patient's PPO and figure out what their estimated out-of-pocket expense will be (if any) before they sign on with us.

•• Diagnostic Assessment with Dr. Struble \$600

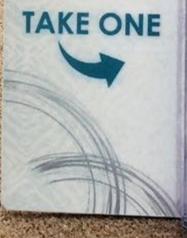
(Includes ~1.5 hour questionnaire for patient to fill out on their own, 30 minutes to review questionnaire and 2 hours of direct patient contact to solidify the diagnostic picture).

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